

WHAT IS CLAIMED IS:

1. A solid heteropolyacid catalyst for a fuel cell, which is a partial salt of a heteropolyacid including a noble metal and/or a transition metal and having a molecular weight of 800 to 10000.

2. The solid heteropolyacid catalyst for a fuel cell according to claim 1,

wherein the noble metal is at least one selected from the group consisting of Ru, Rh, Pd, Ag, Ir, Pt and Au, and the transition metal is at least one selected from the group consisting of Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Y, Zr, Nb, Mo, Ta and W.

3. The solid heteropolyacid catalyst for a fuel cell according to claim 1 or 2,

wherein the partial salt is a partial salt with an alkali metal or an alkali earth metal, a partial salt with an organic ammonium ion, or a partial salt insolubilized in water by a salt formation with a general cation (positive ion).

4. The solid heteropolyacid catalyst for a fuel cell according to any one of claims 1 to 3,

wherein the heteropolyacid is a polyacid having the Keggin structure, the Anderson structure or the Dawson structure.

5. The solid heteropolyacid catalyst for a fuel cell according to any one of claims 1 to 4,

wherein one atom of the noble metal is substituted in a skeleton of the heteropolyacid.

6. The solid heteropolyacid catalyst for a fuel cell according to claim 5,

wherein the atom of the noble metal is one selected from the group consisting of Ru, Rh, Pd, Ag, Ir, Pt and Au.

7. An electrode for a fuel cell characterized in that the solid heteropolyacid for a fuel cell according to any one of claims 1 to 6 is held on a surface of a carbon electrode.

8. An electrode for a fuel cell characterized in that a mixture of the solid heteropolyacid for a fuel cell according to any one of claims 1 to 6, conductive powder and a binder is molded.

9. The electrode for a fuel cell according to claim 8,
wherein the conductive powder is carbon powder or metal powder.

10. The electrode for a fuel cell according to claim 8 or 9,
wherein the binder is an organic polymer binder and/or an inorganic binder.